

Mineral Industry Surveys

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MOLYBDENUM IN JANUARY 1998

Domestic production of molybdenum in concentrate decreased 2% in January 1998 compared with that of the previous month and was 18% less than in January 1997, according to the U.S. Geological Survey. Producer molybdenum stocks in concentrate, oxide, and other product forms were 10,400 metric tons at the beginning of 1998 and 9,229 metric tons at the end of January 1998.

Included in this Mineral Industry Surveys are U.S. production, shipments, and stocks of molybdenum concentrates and materials, plus U.S. consumption by end use of molybdenum in the previous and current months. Also included are trade data for the previous 2 months. During the current month, Platt's Metals Week U.S. monthly average price for molybdenum concentrate was \$4.960 per kilogram (\$2.250 per pound). The average price for dealer molybdenum oxide was \$8.240 per kilogram (\$3.738 per pound) and that for dealer ferromolybdenum was \$11.188 per kilogram (\$5.075 per pound).

For the week ending March 20, 1998, Metals Week U.S. average price for molybdenum concentrate was \$7.826 per kilogram (\$3.550 per pound). The average price for dealer molybdenum oxide was \$9.876 per kilogram (\$4.480 per pound) and that for ferromolybdenum was \$12.015 per kilogram (\$5.450 per pound).

${\bf TABLE~1}\\ {\bf U.S.~SALIENT~MOLYBDENUM~CONCENTRATE~STATISTICS~~1/}$

(Metric tons, contained molybdenum)

	1997	1997 p/		
	January-	January-		
	December	December	January	
Production	60,200	4,530	4,460	
Shipments: 2/				
Domestic	12,400	961	1,090	
Export	20,000	1,490	1,530	

p/Preliminary.

 ${\it TABLE \ 2} \\ {\it U.S. \ REPORTED \ PRODUCTION \ AND \ SHIPMENTS \ OF \ MOLYBDENUM \ PRODUCTS \ 1/} \\$

(Metric tons, contained molybdenum)

	1997	1997 p/		
	January-		1998	
	December	December	January	
Gross production	48,000	3,560	3,810	
Internal consumption 2/	23,300	2,190	2,240	
Gross shipments	25,900	1,820	1,880	

p/ Preliminary.

 ${\it TABLE~3}\\ {\it U.S. REPORTED CONSUMPTION, BY END~USES, AND CONSUMER STOCKS~OF~MOLYBDENUM~MATERIALS~1/2}$

(Kilograms, contained molybdenum)

	Malvihdia	Ferro	Ammonium and sodium	Molyb-		
End use	Molybdic oxides	molyb- denum 2/	molybdate	denum	Other	Total
1997. December:	Oxides	deliuiii 2/	morybuate	scrap	Other	Total
Steel:	-					
Carbon	58,200	W			3,190	61,400
High-strength low-alloy	49.000	8.860			5,170	57,900
Stainless and heat-resisting	170,000	22,900			4.700	198,000
Full alloy	184,000	161,000			2,330	347,000
Tool	63,400	7,370			2,310	73,100
Total	525,000	200,000			12,500	738,000
Cast irons (gray, malleable, and ductile iron)	1,670	35,500			763	37,900
Superalloys	80,900	W		38,500	40,500	160,000
Alloys: (other than steels, cast irons, and superalloys)	-			,	ŕ	ŕ
Welding materials (structural and hard-facing)	- 	W			285	285
Other alloys	- 	W		534	6,150	6,690
Mill products made from metal powder 3/	- 				226,000	226,000
Cemented carbides and related products 4/	- 				21 r/	21 r/
Chemical and ceramic uses:	-					
Pigments			1,290			1,290
Catalysts	77,300		(5/)		87,300 r/	165,000 r/
Other	(6/)				2,840 r/	2,840 r/
Miscellaneous and unspecified uses:	-					
Lubricants					12,000	12,000
Other		36,900	(7/)		1,670 r/	38,500 r/
Grand total	685,000	273,000	1,290	39,100	391,000 r/	1,390,000 r/
Stocks, December 31, 1997	736,000	208,000	11,800	45,200	802,000	1,800,000

See footnotes at end of table.

^{1/} Data are rounded to three significant digits.

^{2/} Includes molybdic oxides, metal powder, ammonium molybdate, sodium molybdate, and other.

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${\it TABLE 3--Continued}\\ {\it U.S. REPORTED CONSUMPTION, BY END USES, AND CONSUMER STOCKS OF MOLYBDENUM MATERIALS 1/2} \\$

(Kilograms, contained molybdenum)

End use	Molybdic oxides	Ferro molyb- denum 2/	Ammonium and sodium molybdate	Molyb- denum scrap	Other	Total
1998, January:				<u></u>		
Steel:	_					
Carbon	51,900	W			3,190	55,100
High-strength low-alloy	W	9,310				9,310
Stainless and heat-resisting	314,000	23,900			4,700	342,000
Full alloy	216,000	163,000			2,330	382,000
Tool	74,600	W			2,310	76,900
Total	656,000	197,000		-	12,500	866,000
Cast irons (gray, malleable, and ductile iron)	1,670	33,000			763	35,400
Superalloys	74,200	W		51,300	47,400	173,000
Alloys: (other than steels, cast irons, and superalloys)						
Welding materials (structural and hard-facing)		W			285	285
Other alloys		W		534	6,150	6,690
Mill products made from metal powder 3/					181,000	181,000
Cemented carbides and related products 4/					5	5
Chemical and ceramic uses:						
Pigments			1,110			1,110
Catalysts	77,300		(5/)		87,300	165,000
Other	W				2,220	2,220
Miscellaneous and unspecified uses:	_					
Lubricants					W	W
Other	48,900	37,700			14,900	102,000
Grand total	859,000	267,000	1,110	51,800	353,000	1,530,000
Stocks, January 31, 1998	589,000	235,000	12,300	45,200	798,000	1,680,000

r/Revised. W Withheld to avoid disclosing company proprietary data; included in "Other" of the "Miscellaneous and unspecified uses" category.

 ${\bf TABLE~4} \\ {\bf U.~S.~EXPORTS~OF~MOLYBDENUM~ORES~AND~CONCENTRATES} \\ {\bf (Including~roasted~concentrate),~BY~COUNTRY~1/} \\$

(Kilograms, contained molybdenum)

		1997		
Country	1996	November	December	Year to date
Australia	30,900	147,000		219,000
Belgium	12,400,000	714,000	1,730,000	14,300,000
Brazil	20,400		2,310	53,600
Canada	268,000	60,200	50,600	556,000
Chile	6,990,000	547,000	621,000	6,450,000
China	1,290,000			313,000
France	5,620			143
Germany	505,000	29,200	79,400	845,000
India	58,600			
Italy	384,000	51,900		322,000
Japan	5,140,000	313,000	468,000	5,840,000
Korea, Republic of	10,200		2,000	2,270
Mexico	5,500,000	621,000	540,000	6,060,000
Netherlands	5,890,000	608,000	1,040,000	15,600,000
Spain	19,900	18,600		140,000
Sweden	473,000	57,100	45,700	925,000
United Kingdom	6,010,000	561,000	444,000	5,610,000
Other		281	700	10,900
Total	45,000,000	3,730,000	5,020,000	57,200,000

^{1/} Data are rounded to three significant digits; may not add to totals shown.

Source: Bureau of the Census.

^{1/} Data are rounded to three significant digits; may not add to totals shown.

^{2/} Includes calcium molybdate.

^{3/} Includes ingot, wire, rod, and sheet.

^{4/} Includes construction, mining, oil and gas, metal working machinery.

^{5/} Included in "Catalyst: Other."

^{6/} Included in "Chemical and ceramic uses: Other: Other."

^{7/} Included in "Miscellaneous and unspecified uses: Other: Other."

 ${\bf TABLE~5} \\ {\bf U.~S.~EXPORTS~OF~FERROMOLYBDENUM,~BY~COUNTRY~}~1/$

(Kilograms, contained molybdenum)

		1997				
Country	1996	November	December	Year to date		
Australia		164		710		
Canada	252,000	34,500	17,800	463,000		
China		12,400	6,120	35,800		
Italy				3,170		
Japan	117,000		14,500	56,200		
Korea, Republic of	1,910		599	2,570		
Malaysia	37,200					
Mexico	117,000	3,820	2,080	104,000		
Singapore	53,900					
Spain	1,160					
Taiwan				10,600		
Venezuela	1,090	1,520		1,520		
Other				182		
Total	581,000	52,400	41,100	678,000		

 $^{1/\,\}mbox{Data}$ are rounded to three significant digits; may not add to totals shown.

Source: Bureau of the Census.

 ${\bf TABLE~6} \\ {\bf U.S.~IMPORTS~FOR~CONSUMPTION~OF~MOLYBDENUM~PRODUCTS~1/}$

(Kilograms unless otherwise specified)

	1997							
	Ja	nuary-Decembe	er		January-December			
	Gross	Contained	Value (c.i.f.)	Gross	Contained	Value (c.i.f.)		
Material	weight	molybdenum	(thousands)	weight	molybdenum	(thousands)		
Ore and concentrates roasted	8,090,000	3,460,000	\$41,300	8,100,000	5,040,000	\$48,600		
Ore and concentrates other	35,600	21,100	173	2,420,000	1,290,000	8,810		
Molybdenum chemicals:								
Oxides and hydroxides	1,160,000	NA	8,850	1,420,000	NA	11,200		
Molybdates of ammonium	665,000	368,000	5,360	848,000	456,000	6,580		
Molybdates (all others)	82,500	36,400	506	240,000	156,000	1,320		
Molybdenum orange	1,840,000	NA	5,710	1,760,000	NA	6,480		
Mixtures of inorganic								
compounds								
Ferromolybdenum	7,870,000	4,960,000	55,100	5,840,000	3,640,000	36,700		
Molybdenum powders	125,000	110,000	3,470	77,000	68,100	2,570		
Molybdenum unwrought	91,100	84,400	2,380	326,000	301,000	4,890		
Molybdenum waste and scrap	693,000	640,000	9,720	536,000	527,000	8,670		
Molybdenum wrought								
Molybdenum wire	1,990	NA	320	4,150	NA	475		
Molybdenum other	3,870	NA	1,060	6,750	NA	1,170		
Total	20,700,000	11,700,000	134,000	21,600,000	11,500,000	137,000		

NA Not available.

 $1/\,\mbox{Data}$ are rounded to three significant digits; may not add to totals shown.

Source: Bureau of the Census.